$(size = 600' \times 400' = 24,000 sq. ft.)$ 

DATA CENTER 100

Total cooling required = 1,320,000 BTUs/hr within 6,000 sq. ft. Requires 220 BTUs/hr of cooling per sq. ft. Total cooling required = 972,000 BTUs/hr within 6,000 sq. ft. 12 SunFire 15K servers, each generating 81,000 BTUs/hr each generating 27,500 BTUs/hr 48 SunFire 6800 servers, **ZONE 112 ZONE 114** Total cooling required = 552,000 BTUs/hr Requires 46 BTUs/hr of cooling per sq. ft. each generating 920 BTUs/hr 600 personal computers, within 12,000 sq. ft. **ZONE 110** 

FIG. 1

Requires 162 BTUs/hr of cooling per sq. ft.

IEU 250	(EU 200 or EU 210)		Two 30A 208V L6- 30R outlets; 4111 watts consumed	14,060 BTUs/hr	970 lbs. (440 Kg)	24" X 48" = 8 ft²	4 multi-mode fiber	4.7 TB
EU 220	Server A		Four 30A 208V L6- 30R outlets; 8488 watts consumed	29,030 BTUs/hr	1,000 lbs. (454 Kg)	24" X 54" = 9 ft²	4 multi-mode fiber, 4 cat-5 copper	24 CPUs, 96GB RAM
EU 210	Storage Array B		Two 30A 208V L6- 30R outlets; 4111 watts consumed	14,060 BTUs/hr	780 lbs (354 Kg)	24" X 48" = 8 ft²	2 multi-mode fiber	4.7 TB
EU 200	Storage Array A		Two 30A 208V L6- 30R outlets; 3812 watts consumed	13,040 BTUs/hr	970 lbs. (440 Kg)	24" X 48" = 8 ft²	4 multi-mode fiber	5.2 TB
		Requirements	Power:	Cooling:	Weight:	Size:	Bandwidth:	Functional Capacity:

**FIG. 2** 

Total Requirements		480 30A 208V L6-30R outlets; 949,440 watts consumed	3,207,600 BTUs/hr	164,800 lbs. (74,800 Kg)	1,640 H²	480 multi-mode fiber 160 cat-5 copper	960 CPUs, 3.84TB RAM, 832TB Disk Storage
<b>160</b> EU 200	Storage Array A	320 30A 208V L6-30R outlets; 609,920 watts consumed	2,086,400 BTUs/hr	124,800 lbs. (56,640 Kg)	$8 \text{ ft}^2 \times 160 = 1,280 \text{ ft}^2$	320 multi-mode fiber	832TB
<b>40</b> EU 220	Server A	160 30A 208V L6-30R outlets; 339,520 watts consumed	1,121,200 BTUs/hr	40,000 lbs. (18,160 Kg)	$9ft^2 \times 40 = 360 ft^2$	160 multi-mode fiber, 160 cat-5 copper	960 CPUs, 3.84TB RAM
	Requirements	Power:	Cooling:	Weight:	Size:	Bandwidth:	Functional Capacity:

FIG. 3

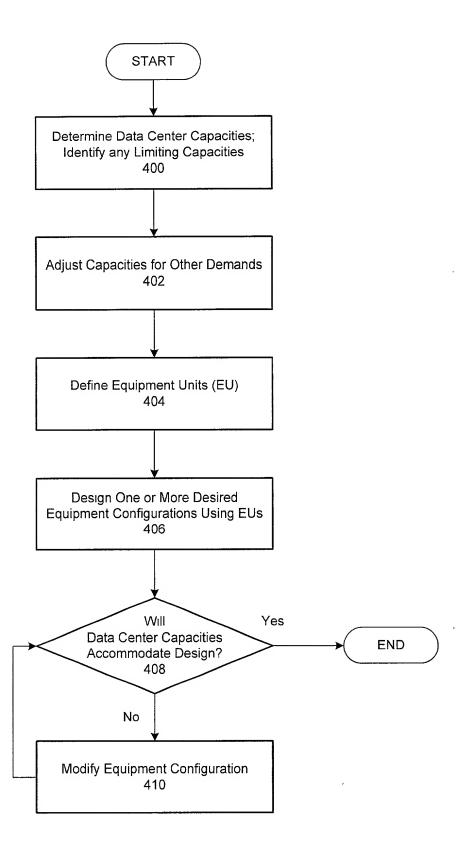


FIG. 4

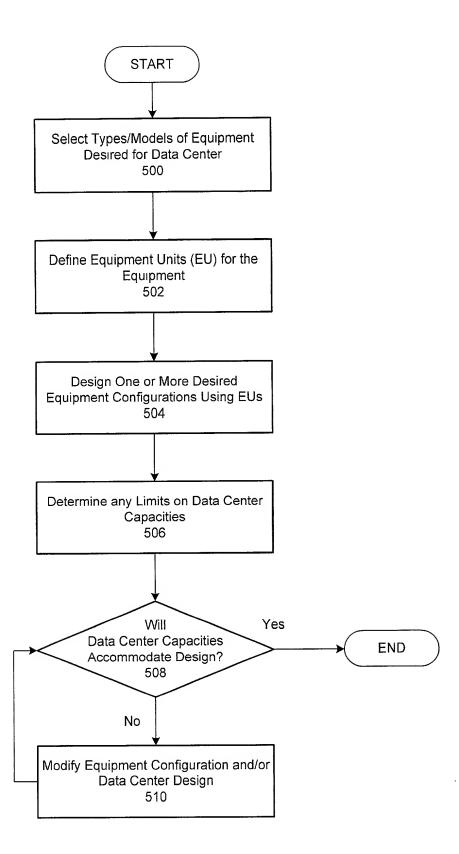


FIG. 5